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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,661	05/16/2002	Hugh-Peter Granville Kelly	KEMP0006	4263

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GLENN PATENT GROUP
3475 EDISON WAY, SUITE L
MENLO PARK, CA 94025

[REDACTED] EXAMINER

WAKS, JOSEPH

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/031,661	KELLY, HUGH-PETER GRANVILLE	
Examiner	Art Unit	Joseph Waks	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 May 2002.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3 is/are rejected.
 7) Claim(s) 4-10 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 16 May 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PC/GB00/02726, filed on July 14, 2000.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In line 2 "comprises" is a legal phraseology.

Claim Objections

3. Claims 4-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 4 depends on multiple dependent claim 3, a multiple dependent claim 5 depends on multiple dependent claims 3 and 4, a multiple dependent claim 6 depends on multiple dependent claims 3-5, multiple dependent claims 7 and 8 depend on multiple dependent claims 3-6, a multiple dependent claim 9 depends on multiple dependent claims 3-8, and a multiple dependent claim 10 depends on multiple dependent claims 3-9 . See MPEP § 608.01(n).
- Accordingly, the claims 4-10 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 7 and 11, “float(s)”, in claim 2, line 2, “float(s)” and “link(s)”, and claim 3, line 1, “float(s)” and “link(s)” are indefinite since it is unclear whether the limitations in parenthesis are the part of the claimed invention or not, and the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kafka (US 3,362,336) in view of Raichlen et al. (US 4,594,853).

Kafka discloses in Figure 4 a linear generator having a stator 67 and an armature 65 linearly driven relative to the stator to generate electrical energy and a float 63 linked to the armature and immersed in the sea to be subject to the action of waves to drive the armature, the float, the armature and the link constitute a wave-driven mass maintaining the submerged portion of the float neutrally buoyant. However, Kafka does not disclose the weight of the wave-driven

mass being substantially equal to half the up-thrust provided by the water displaced by the float when fully immersed in the water.

Raichlen et al. disclose a wave powered generator having a neutrally buoyant float 14 that maintains the float with a half volume above the water and the other half of the float being submerged in the water for the purpose of exerting an equal force on the reciprocating equipment on the up and down strokes of the float and to avoid inadequate tracking of the wave motion.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the linear generator as taught by Kafka and to maintain maintains the float with a half volume above the water and the other half of the float being submerged in the water as taught by Raichlen et al. for the purpose of exerting an equal force on the reciprocating equipment on the up and down strokes of the float and to avoid inadequate tracking of the wave motion.

The weight of the wave-driven mass (i.e. the float, the armature and the link) being substantially equal to half the up-thrust provided by the water displaced by the float when fully immersed in the water is inherent to the disclosed structure.

Re claims 2 and 3, Kafka discloses in column 4, lines 72-74, that the arrangement of the generator is such that the armature can be moved only as a result of substantial wave action i.e. the mass the of the magnet or the armature is the prevailing mass in the system to be overcome only by a substantial wave action. Hence, the weight of the load and the links are negligible and their contribution to the effective parasitic mass is also negligible.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703) 308-1676. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



JOSEPH WAKS
PRIMARY PATENT EXAMINER
TC-2800

JW
July 24, 2003